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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/758,625	01/11/2001	Ralph H. Echols	2000-IP-001727	8980

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EXAMINER

CECIL, TERRY K

ART UNIT PAPER NUMBER

1723

DATE MAILED: 05/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/758,625

Applicant(s)

ECHOLS ET AL.

Examiner

Mr. Terry K. Cecil

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 April 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 5,6,8,10,15,38-54 and 68-83 is/are pending in the application.
- 4a) Of the above claim(s) 38-54 and 68-83 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5,6,8,10 and 15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 1723

## DETAILED ACTION

### *Claim Rejections - 35 USC ' 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 8 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Gano (U.S. 6,478,091). Gano discloses a well screen having a side wall material wherein a line is embedded therein and is attached to a sensor as follows:

- As shown in figure 1D, line 17 is embedded between screen 14 and flow control device 46. Also as explained in col. 5, lines 50-60, the flow control device 62 of figure 4 can be used in place of flow control device 46 of figure 1D. The flow control device 62 of figure 4 depicts the flow openings 80, wherein upon replacement of flow control device 46 with device 62, line 17 would be between (embedded) portion 62 and 14 of the well screen.
- As shown in figs. 5A and 5B, lines 83 are embedded within the well screen sidewall.

Gano also discloses a liner assembly 36 that is inflatably expandable (col. 5, lines 6-9) [as in claim 8]. Other embodiments of the inflatable well screen portion is shown in other figures, e.g.

Art Unit: 1723

figures 5A and 5B. Note that the support for applicant's inflatably expandable media is found on pages 16-17 of his specification and is shown in figures 10A and 10B.

Gano also discloses that lines 17 can be fiber optic cables attached to sensors (col. 4)[as in claim 15].

3. Claim 10 is rejected under 35 U.S.C. 102(e) as being anticipated by Brockman (U.S. 6,505,682 B2). As shown above figs 23 and 10, line 166 of Brockman is embedded in the sidewall 33 of the well screen. Brockman also teaches sensors 38 in communication with a controller (50 or 150) for measuring parameters within or without the well screen [as in claim 10]. As disclosed in e.g. col. 5, lines 4-19, the sensors measure parameters such as the water/oil ratio or oil/gas ratio. Since such ratios would not be affected by screen 30 (which only filters out gravel), the sensor *does* sense a parameter external to the well screen [as in claim 10].

#### ***Claim Rejections - 35 USC ' 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

Art Unit: 1723

Determining the scope and contents of the prior art.

Ascertaining the differences between the prior art and the claims at issue.

Resolving the level of ordinary skill in the pertinent art.

Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brockman in view of Jones (U.S. 5,842,516). Claim 5 has the limitation of tubular protective shield lining in flow passages through the sidewall. Jones teaches inserts 29a that are tubular protection flow passage linings [as in claim 5]. It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention to have the inserts of Jones in the flow passages of Brockman (e.g. flow passages 36 of figure 14) since Jones teaches the benefit of protection from erosion (abstract).

6. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brockman in view of Jordan et al. (U.S. 5,765,756), hereinafter "Jordan". Jordan teaches a jet nozzle flow passage for delivering fluids to a well bore. As shown above, Jordan teaches "tubular protective sleeves" e.g. 10, 12 or 14 in a flow passage [as in claim 5] that includes flexible retainers, e.g. o-ring elements 10S, 12S, and 14S [as in claim 6]. It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention to have the jet nozzles of Jordan in the sidewall of Brockman, since Jordan teaches the benefit of delivering cleaning chemicals to a well bore (col. 1, lines 5-15 and col. 25, line 65). It is pointed out that Brockman teaches fluid lines 166 for delivering chemicals (col. 6, lines 46-56) to the well bore and for communicating with downhole tools (col. 2, lines 40-50) and is therefor conducive to modification by Jordan.

*Response to Arguments*

7. Applicant's arguments have been fully considered but are not persuasive because of the following reasons:

- Applicant's amendments to claims 8 and 15 necessitated the application of the new prior art reference of Gano.
- As explained above, the sensors 38 of Brockman do sense parameters external to the well screen and anticipates claim 10.
- Concerning the rejection of claim 5 over Brockman in view of Jones, the applicant argues that the combination does not teach lining a flow passage extending through a well screen sidewall. However, it is pointed out that the flow passage (e.g. 36) shown in figure 14 of Brockman is located through a sidewall of the well screen such that upon modification, the sleeve 29a of Jones would be located therein. The examiner further contends that the benefit of providing erosion resistance at a flow opening in a well bore environment is sufficient motivation for combining the references.
- Concerning the rejection of claims 5 and 6 of Brockman over Jordan, the applicant argues that there is no motivation to combine the slurry jetting structure with the sponge-based chemical dispersion apparatus. However, the examiner points out that the chemical delivery means of Brockman is not limited to sponge-based chemical dispersion apparatuses but that such is only listed as an example. The examiner contends that the jet flow provided by the nozzle of Jordan would provide a dispersion effect. Applicant also argues the sleeves of Jordan are not characterized as "tubular protective sleeves" but are telescopic extenders. However, the examiner contends that since the elements line the flow passage preventing jet flow contact with

Art Unit: 1723

the walls thereof, a protective effect is resulted. As for arguments concerning an flexible retainer between the inserts and the flow passages, o-rings 10S, 12S and 14S are other examples of retainers of flexible material that are taught by Jordan and are shown in Fig 2A that was reproduced in the prior office action.

### ***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

### ***Other Pertinent Art***


9. Applicant may wish to consider the following germane references before amending the claims in a continuing application: Jones (U.S. 6,227,303) is yet another example of a well screen that includes tubular protective sleeves **20a**.

Art Unit: 1723

10. Contact Information:

- Examiner Mr. Terry K. Cecil can be reached at (703)305-0079 for any inquiries concerning this communication or earlier communications from the examiner. Note that the examiner is on the increased flextime schedule but can normally be found in the office during the hours of 8:00a to 4:30p, on at least four days during the week M-F.
- The group receptionist can be reached at (703)308-0661 for inquiries of a general nature or those relating to the status of this or proceeding applications.
- Wanda Walker, the examiner's supervisor, can be reached at (703)308-0457 if attempts to reach the examiner are unsuccessful.
- Fax numbers for this art unit are as follows:
  - i. (703)872-9310 for *official* faxes (i.e. faxes to be entered as part of the file history) that are not after-final; and
  - ii. (703)872-9311 if after-final.

TKC  
May 13, 2003

  
JOSEPH DRODGE  
PRIMARY EXAMINER